

$X_A$  = Conversion  
 $T$  = Temperature

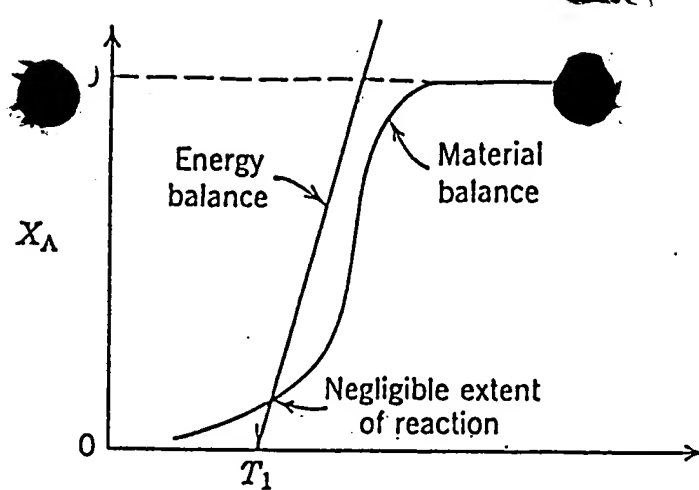


FIG. 1 (a)

$X_A$  = Conversion  
 $T$  = Temperature

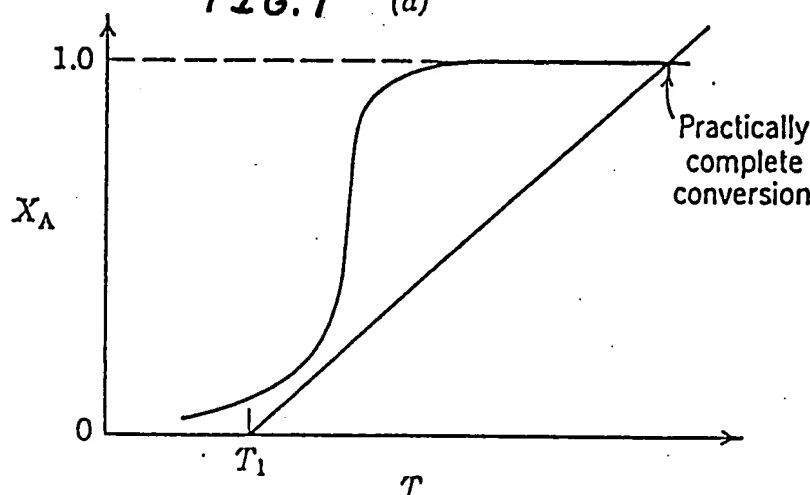


FIG. 1 (b)

$X_A$  = Conversion  
 $T$  = Temperature

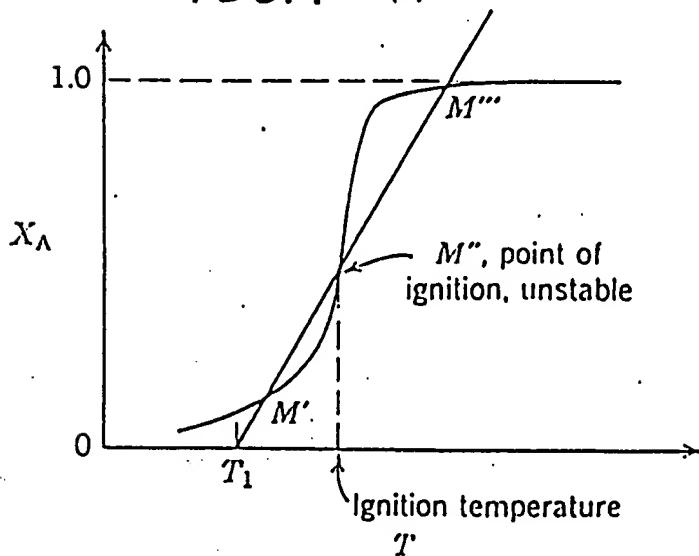
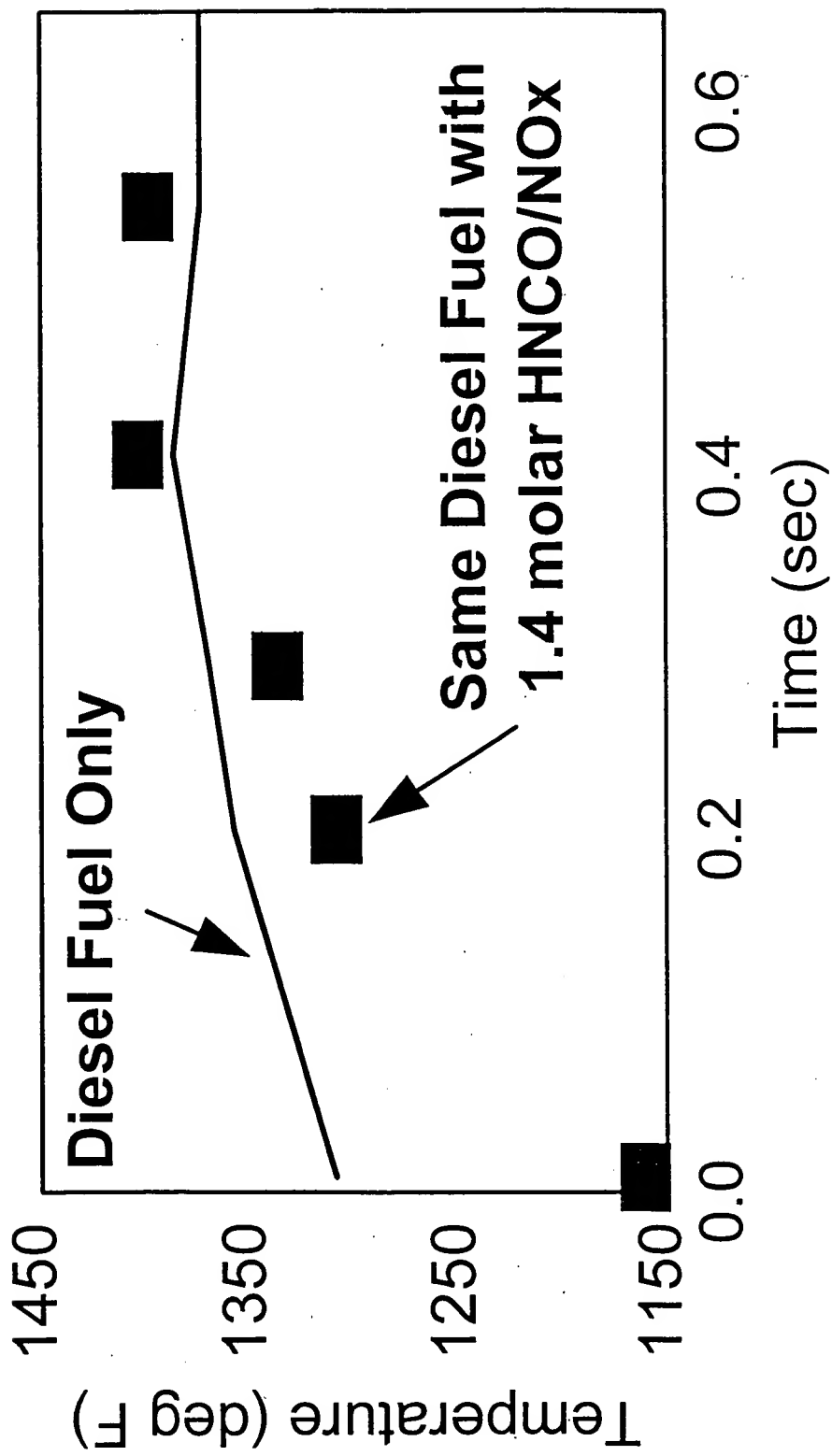
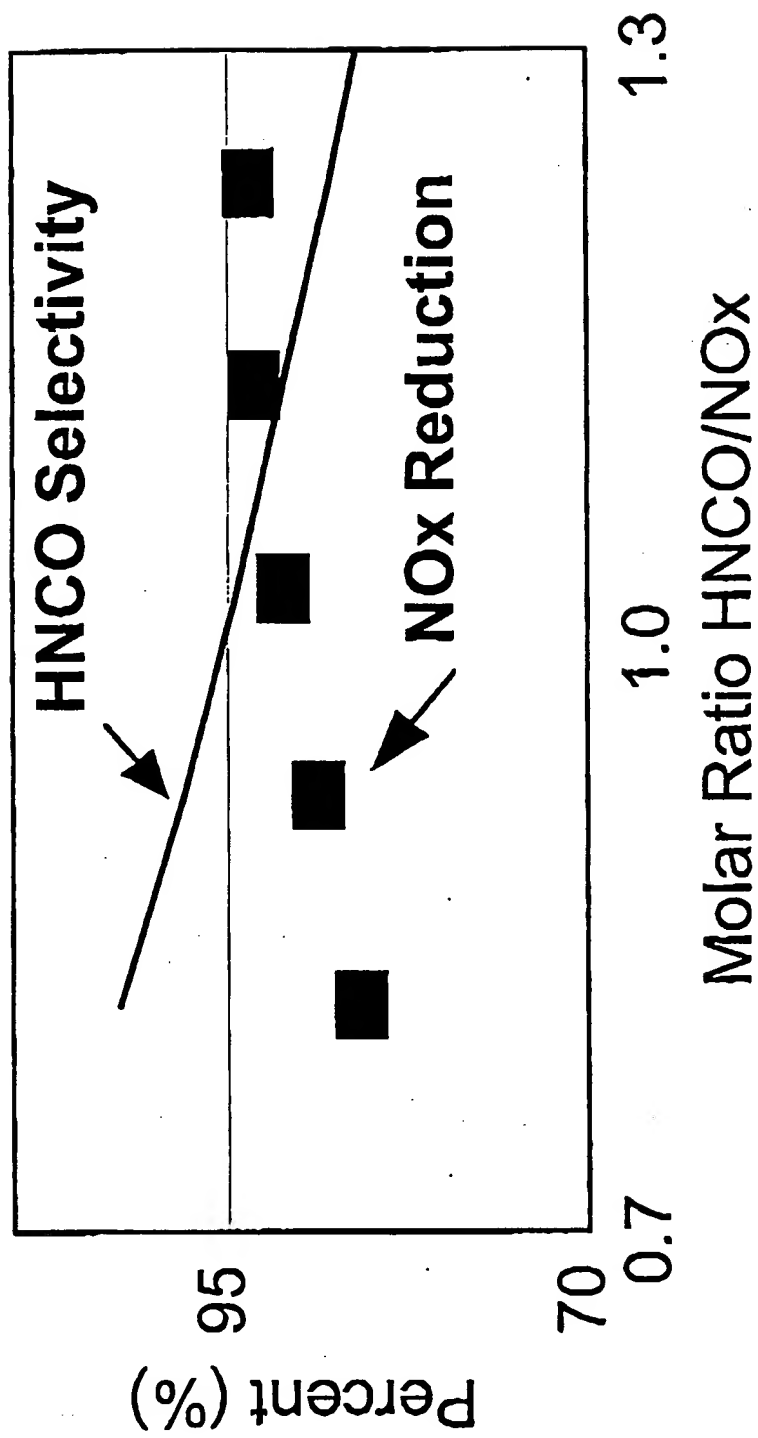


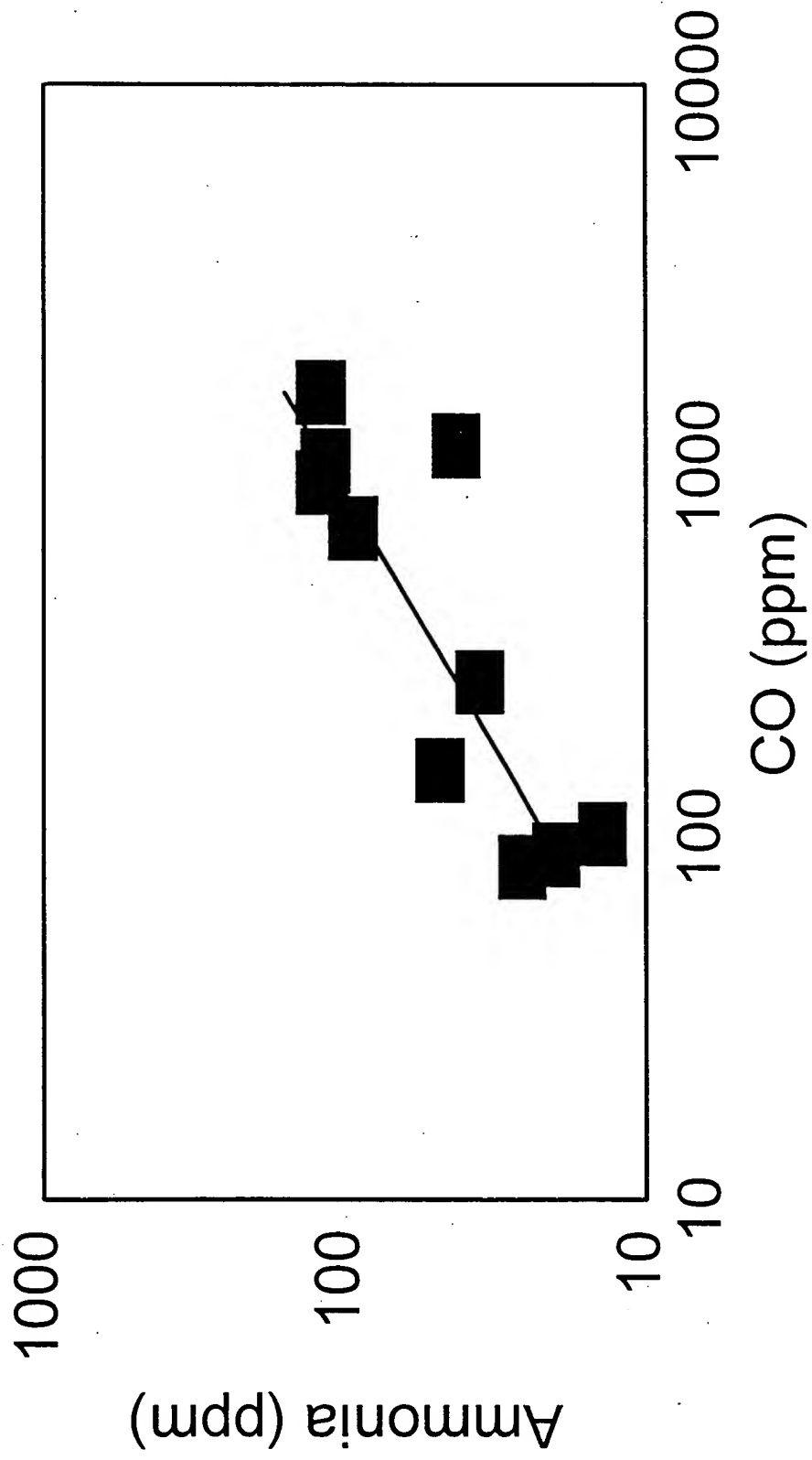
FIG. 1 (c)



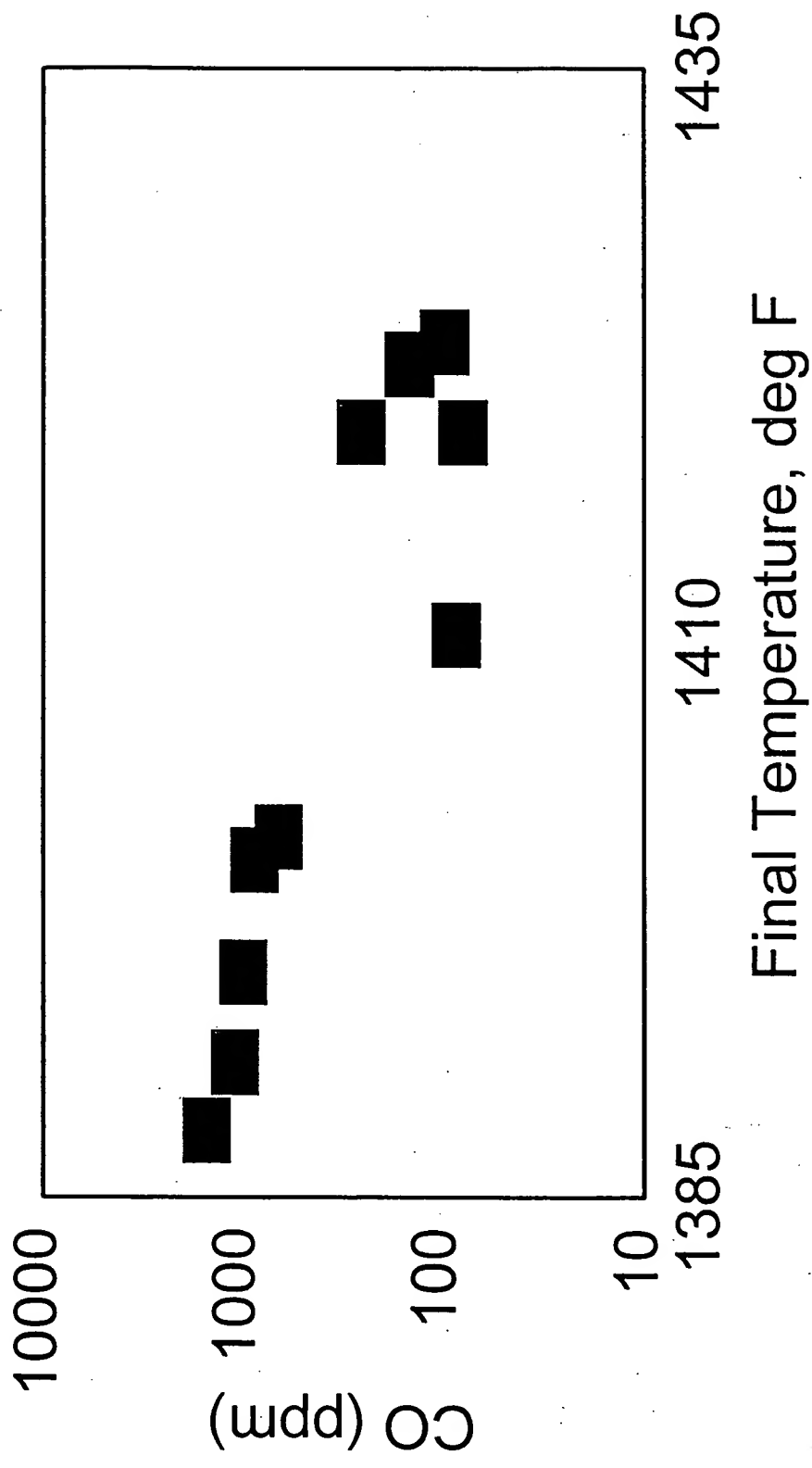
**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**

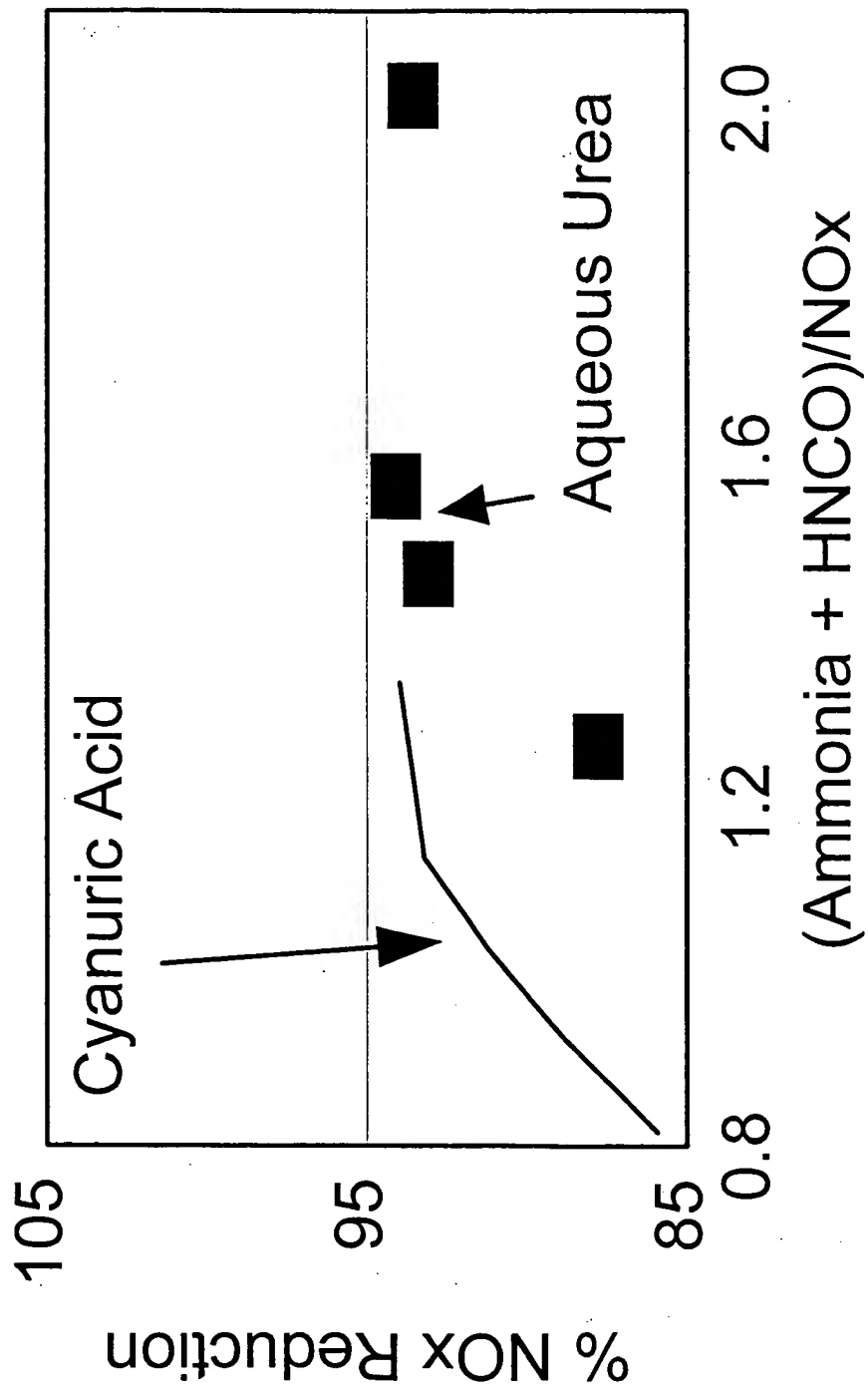


Figure 6

Exhaust Gas  
Containing NO<sub>x</sub> and O<sub>2</sub>

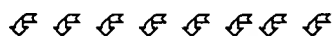


Hydrocarbon(s) →

Reductant(s) →

Autoignition and  
Autothermal Heating

Generating NH<sub>3</sub>, HNCO,  
or Combination Thereof



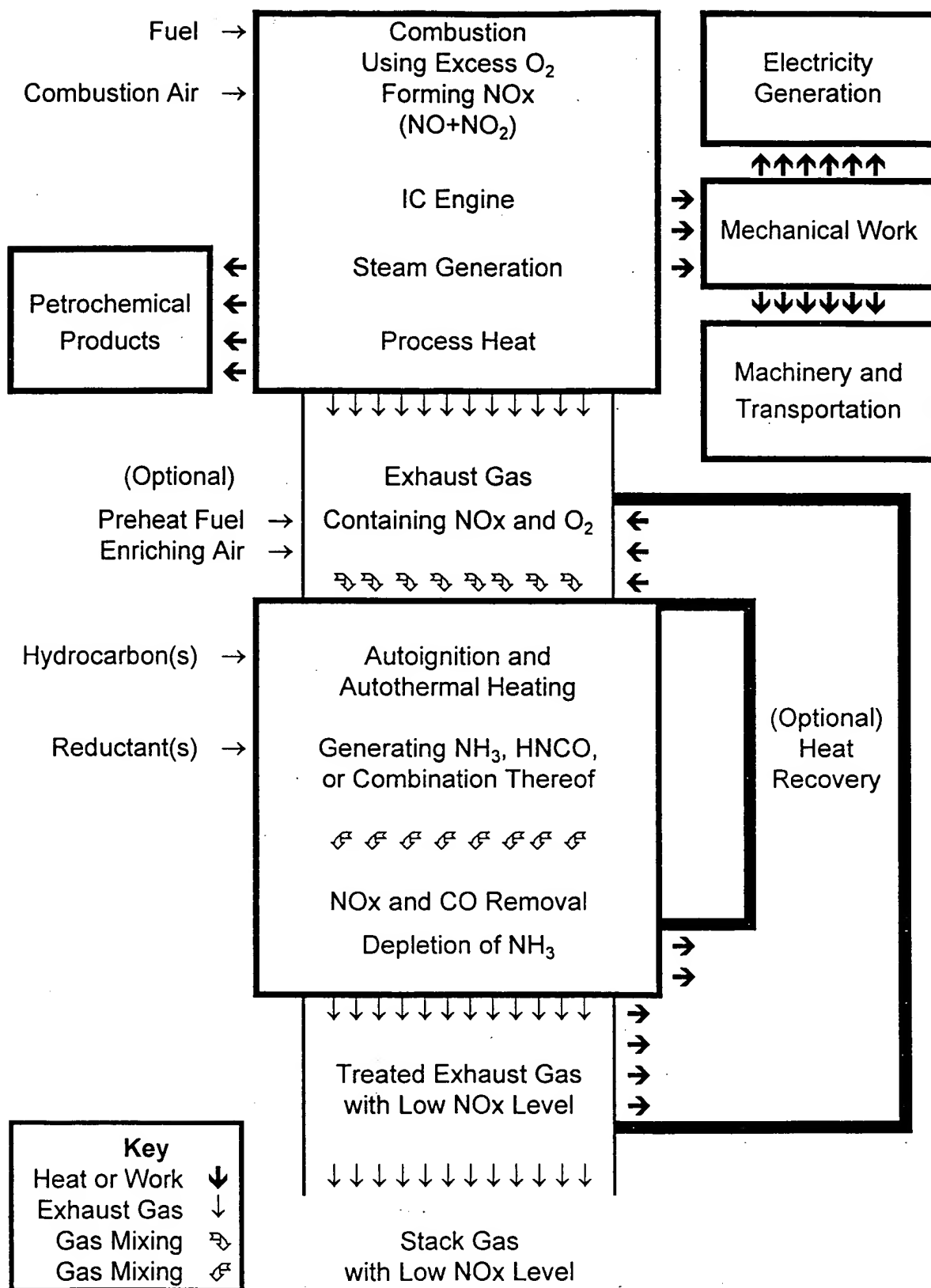
NO<sub>x</sub> and CO Removal  
Depletion of NH<sub>3</sub>



Treated Exhaust Gas  
with Low NO<sub>x</sub> Level

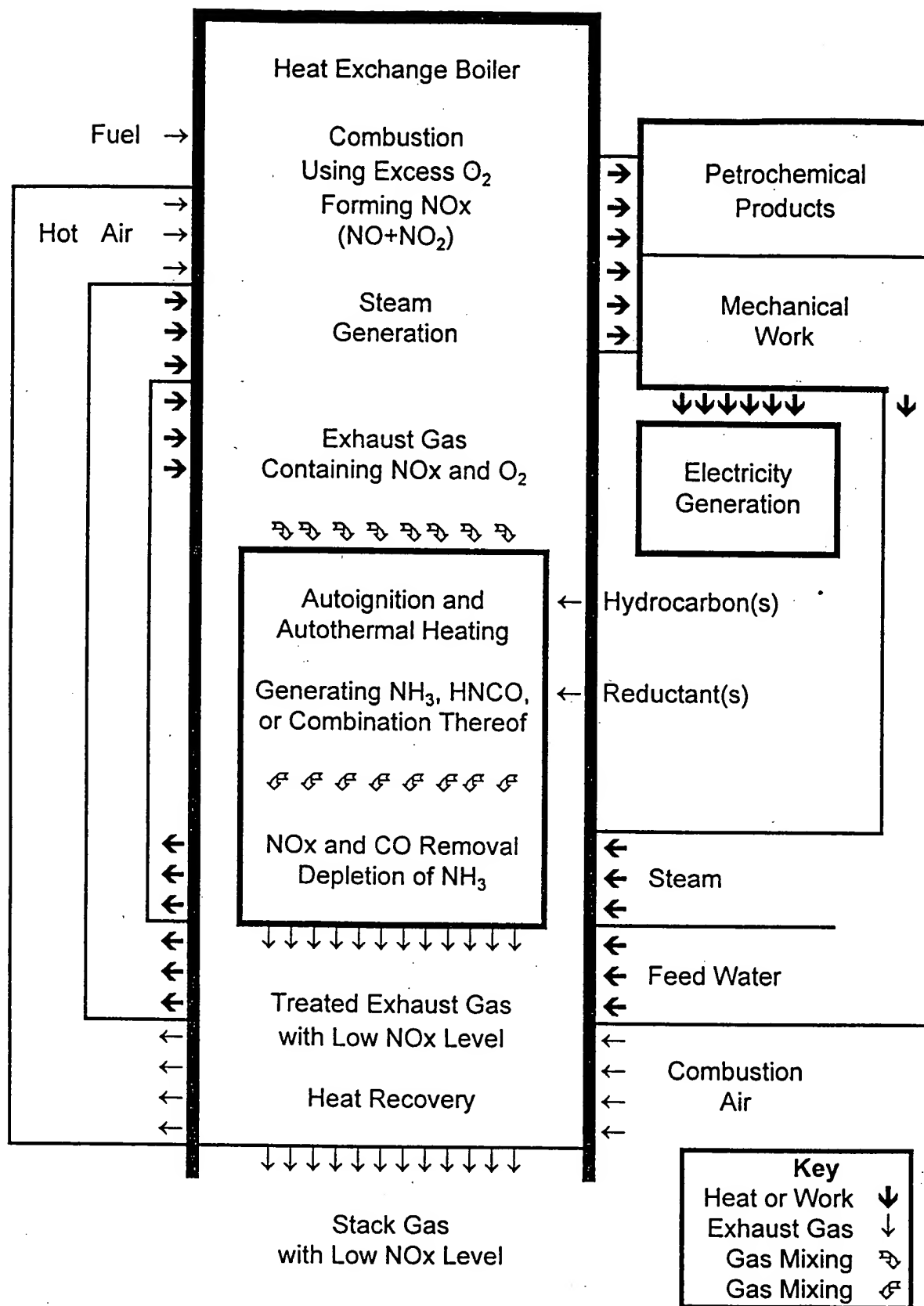
Key	
Heat or Work	↓
Exhaust Gas	↓
Gas Mixing	↻
Gas Mixing	↻

Figure 7



**Figure 8**





**Figure 9**